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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,816	03/18/2004	Richard W. Neu	39356/46546	5915

21888 7590 02/07/2005  
THOMPSON COBURN, LLP  
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ST LOUIS, MO 63101

EXAMINER
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BASINGER, SHERMAN D

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

 <b>Office Action Summary</b>	<b>Application No.</b> 10/803,816	<b>Applicant(s)</b> NEU, RICHARD W.	
	<b>Examiner</b> Sherman D. Basinger	<b>Art Unit</b> 3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/16/04&amp;1/4/05</u> | 6) <input type="checkbox"/> Other: ____  |

**DETAILED ACTION**

***Oath/Declaration***

1. The declaration filed under 37 C.F.R. 1.63 in response to the notice of a missing or unsigned declaration has been received.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 10, 11, 17 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan 58-174078.

Japan 078 discloses a vessel converted from single outer hull construction into double hull construction

without alteration of the single outer hull (see figure 1B), said single hull vessel 4 having a central cargo tank 3

flanked on either side by port and starboard wing tanks 9, said central cargo tank being defined by port and starboard sidewalls 2 and fore and aft transverse bulkheads, and further

comprising an added elevated floor 14 in said central cargo tank, said elevated floor spanning

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said sidewalls and said bulkheads to define within said outer hull a sealed compartment 7 separating the central cargo tank from the outer hull and wherein said wing tank internal longitudinal bulkheads 2 comprise the sidewalls of the central cargo tank 3.

Japan 078 also discloses a vessel converted from single outer hull construction into double hull construction (see figure 1B),

said single hull vessel 4 having a central cargo tank 3 flanked on either side by port and starboard wing tanks 9, each of said wing tanks having internal longitudinal bulkheads 2 defining the sidewalls of the central cargo tank, wherein said vessel is converted into double

hull construction solely by adding an elevated floor 14 spanning said sidewalls to define a

sealed compartment 7 separating the central cargo tank from the single hull, and further comprising a plurality of inherently present transverse bulkheads, said transverse bulkheads defining the central cargo tank, said elevated floor extending between and attached thereto.

Japan 078 also discloses a method for converting a vessel from single outer hull construction into double hull

construction without alteration of the single outer hull, said single hull vessel 4 having a

central cargo tank 3 flanked on either side by port and starboard wing tanks 9, said central cargo tank being defined by port and starboard sidewalls 2 and inherently present fore and aft transverse bulkheads, the method comprising adding an elevated floor 14 in said central cargo tank, said elevated floor spanning said sidewalls and said bulkheads to define with said outer hull a sealed compartment 7 separating the central cargo tank 3 from the outer hull. (see figure 1B).

4. Claims 1, 2, 10, 11, 12, 17, 18 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan 53-40995.

Japan 995 discloses a vessel converted from single outer hull construction into double hull construction

without alteration of the single outer hull (see figures 3 and 4), said single hull vessel 1 having a central cargo tank 27

flanked on either side by port and starboard wing tanks 6, said central cargo tank being defined by port and starboard sidewalls 3 and fore and aft transverse bulkheads 4, and further

comprising an added elevated floor 22 in said central cargo tank, said elevated floor spanning

said sidewalls and said bulkheads to define within said outer hull a sealed compartment separating the central cargo tank from the outer hull and wherein said wing tank internal longitudinal bulkheads 3

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comprise the sidewalls of the central cargo tank 27.

Japan 995 also discloses a vessel converted from single outer hull construction into double hull construction (see figure 4),

said single hull vessel 1 having a central cargo tank 27 flanked on either side by port and

starboard wing tanks 6, each of said wing tanks having internal longitudinal bulkheads 3 defining the sidewalls of the central cargo tank, wherein said vessel is converted into double

hull construction solely by adding an elevated floor 22 spanning said sidewalls to define a sealed compartment separating the central cargo tank from the single hull, and further comprising a plurality of transverse bulkheads 4, said transverse bulkheads defining the central cargo tank, said elevated floor extending between and attached thereto.

Japan 995 also discloses a method for converting a vessel from single outer hull construction into double hull

construction without alteration of the single outer hull (see figure 4), said single hull vessel 1 having a

central cargo tank 27 flanked on either side by port and starboard wing tanks 6, said central cargo tank being defined by port and starboard sidewalls 3 and fore and aft transverse bulkheads 4, the method comprising adding an elevated floor 22 in said central cargo tank, said elevated floor spanning said sidewalls and said bulkheads to define with said outer hull a sealed compartment separating the central cargo tank 27 from the outer hull, further comprising adding support members 30 for supporting said elevated floor above the outer hull.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 4, 5, 6, 13, 14, 19-21, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 995 in view of Hagner.

Japan 995 does not disclose the elevated floor 22 comprising a plurality of bottom plates attached to each other and to the sidewalls and bulkheads. Japan 995 also does not disclose installing a plurality of bottom plates including installing a plurality of bottom plates that span the sidewalls and attaching adjacent bottom plates to span the bulkheads.

Hagner discloses plates 81.

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It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to cut the piece of metal from the deck of Japan into plates similar to plates 81 of Hagner so that the elevated floor 22 of Japan 995 is made up of plates attached to each other and to the sidewalls and bulkheads and such that installing a plurality of bottom plates includes installing a plurality of bottom plates that span the sidewalls and attaching adjacent bottom plates to span the bulkheads. Motivation to do so is not to have to handle one big plate.

The longitudinal framing system of claim 4 would be made up of 30 and 31 of Japan 995.

The added support members of claim 5 would be 22a of Japan 995.

The added support members of claim 6 would be 15 of Japan 995.

The hatch of claim 21 is 24 of Japan 995.

7. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 995 and Hagner as applied to claim 3 above, and further in view of Garcia.

Japan 995 does not disclose said central cargo tank including a longitudinal bulkhead extending along a length thereof to form a plurality of central cargo tanks, at least one of said central cargo tanks having said elevated floor, and wherein each of said plurality of central cargo tanks has an associated elevated floor.

Garcia discloses a central cargo tank including a longitudinal bulkhead 18 extending along a length thereof to form a plurality of central cargo tanks 12 and 14.



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It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains in view of the teachings of Garcia to provide Japan 995 with a longitudinal bulkhead similar to 18 of Garcia extending along a length thereof to form a plurality of central cargo tanks. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide at least one of said central cargo tanks with the elevated floor 22 and also to provide each of the plurality of central cargo tanks with an associated elevated floor.

Motivation to do so is to convert a ship which has a plurality of central cargo tanks with the teachings of Japan 995, , or to modify the ship of Japan 995 to be of the type which has two central cargo tanks, each smaller than a single larger tank. Thus, different types of cargo can be carried in each of the tanks making the ship more versatile.

8. Claims 12, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 995 in view of Garcia.

Japan 995 does not disclose said central cargo tank including a longitudinal bulkhead extending along a length thereof to form a plurality of central cargo tanks, at least one of said central cargo tanks having said elevated floor.

Garcia discloses a central cargo tank including a longitudinal bulkhead 18 extending along a length thereof to form a plurality of central cargo tanks 12 and 14.

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It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains in view of the teachings of Garcia to provide Japan 995 with a longitudinal bulkhead similar to 18 of Garcia extending along a length thereof to form a plurality of central cargo tanks. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide at least one of said central cargo tanks with the elevated floor 22.

Motivation to do so is to convert a ship which has a plurality of central cargo tanks with the teachings of Japan 995, or to modify the ship of Japan 995 to be of the type which has two central cargo tanks, each smaller than a single larger tank. Thus, different types of cargo can be carried in each of the tanks making the ship more versatile.

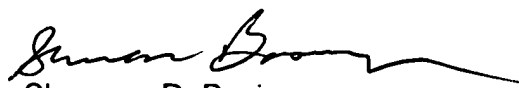
### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 703-308-1139. The examiner can normally be reached on M-F (6:00-2:30 ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sherman D. Basinger  
Primary Examiner  
Art Unit 3617

2/1/05

2/1/05